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Nota di contenuto	Title Page; Copyright Page; Contents; Foreword; Preface; Acknowledgments; Chapter 1 Equipment for bypass; Oxygenators; The oxygenator membrane; The integral ALF (select models only); The venous reservoir; The cardiotomy filter; The heat exchanger; Arterial line filters; Tubing packs; Cardioplegia systems; Recirculating cardioplegia system; Nonrecirculating cardioplegia system; Continuous cardioplegia system; The heart-lung machine; The arterial pump head; The heater-cooler system; Cannulae; Venous cannulae; Arterial cannulae; References; Oxygenators and emboli; Gaseous microemboli on bypass Cardioplegia in general del Nido cardioplegia solution; Microplegia; Arterial pump heads; Chapter 2 Priming the bypass circuit; Prime constituents; Common prime constituents; Steps for priming; Where and when to prime?; Water testing the oxygenator's integrated heat exchanger; Carbon dioxide flush; Crystalloid prime; Blood prime; References; Chapter 3 The bypass plan; Communication agreement for case; Anticoagulation management; Minimizing circuit exposure; Limiting the nonphysiologic appearance of bypass circuitry; Limiting activation of procoagulant factors Monitoring the effect and dosing of heparin Reversing the anticoagulation effect of heparin; Empiric protamine dosing; HDR curve protamine dosing; Protamine titration dosing; Protamine

administration; Blood gas management; Carbon dioxide management; Oxygenation strategy; Hematocrit management; Practical application for bypass; Blood pressure management; Temperature management; Temperature ranges; The concept of Q10; Cooling and warming; Hypothermia for myocardial protection; Flow rates, regional perfusion, and hypothermic circulatory arrest; Flow rates
Regional Perfusion and Hypothermic Circulatory Arrest
Methods of ultrafiltration; Before bypass; On bypass; After bypass; Standard and augmented venous return; Standard venous return with gravity siphon drainage; Augmented venous return; The prebypass checklist; The surgical safety checklist for congenital heart surgery; References; Team communication; Anticoagulation; Blood gas management for cardiopulmonary bypass; Oxygenation strategy for cardiopulmonary bypass; Gaseous microemboli and cardiopulmonary bypass; Hematocrit management; Blood pressure management; Temperature management
Flow rates for cardiopulmonary bypass
Regional low-flow perfusion and hypothermic circulatory arrest; Future therapies for organ and brain protection; Prebypass ultrafiltration; Modified ultrafiltration; Great Ormond Street modified ultrafiltration; Halifax simplified modified ultrafiltration; Standard and augmented venous return; Prebypass checklist; Surgical safety checklist; Chapter 4 Typical phases of cardiopulmonary bypass; Commencement of bypass; Standard support phase of bypass; Termination of bypass; Post bypass; Bypass times; Reference; Chapter 5 Additional notes based on bypass tasks
Prebypass

Sommario/riassunto

Confidently devise a safe and successful 'plan for the pump run' for patients undergoing surgery for congenital heart disease. This practical guide for perfusionists and other members of the cardiac surgical team provides information on the devices, technology and techniques required for successful bypass of patients with congenital heart defects
A practical, spiral-bound, go-to reference designed to answer the most frequently-posed questions about bypass for CHD, the surgical treatment of which is often complicated
Focuses on the latest technology and techniques and provides clear, matter-of
